

Krebs - Stammzell-, Bakterien- Persister-Therapie, CD47, Tetracyclin, Salinomycin, Seneca-Valley-Virus, MikroRNA, Amanitin, Gc-MAF etc.

Cancer Stem Cells, Bacteria Persister Therapy, CD47, Tetracyclines, Salinomycine, Seneca-valley-virus, MikroRNA, Amanitine, Gc-MAF a.o.

“Die **Tumor- und Neoplasma- Medizin** wird im **21. Jahrhunderts** eine Mitochondrien – Filamenten – Mizellen * – Beziehungs * – Medizin sein” (Huismans BD 2014).

➔ Midichloria mitochondrii ➔ <http://www.erlebnishaft.de/gentransfer.pdf>

"The **medicine of the 21st century** will be a medicine of mitochondria, filaments, micelles * and relationships *" (Huismans BD 2014).

Krebsstammzellen oder **Tumorstammzellen** sind nach D Bonnet und J Dick das zentrale Element einer **1997** erstmals aufgestellten Theorie zur Entstehung von bösartigen Tumoren.

Cancer stem cells or **tumor stem cells** are by D Bonnet and J Dick the central element of a first time in **1997** established theory on the origin of malignant tumors

Quelle: <http://de.wikipedia.org/wiki/Krebsstammzelle>

Alfred Knudson's "Two-Hit" Theory of Cancer Causation. https://youtu.be/h_sfOYFJTfU

Bakterien Persister bzw. bakterielle L-Formen sind **Bakterienvarianten** bei denen der Stoffwechsel auf extrem langsam läuft und die deswegen weitaus antibiotikaresistent sind.

Persister bacteria or bacteria L-Forms are **bacteria variants** that run their metabolism in a very clear savings flame and therefore are immune to virtually all antimicrobial agents.

- ➔ **Bakterielle L-Formen** <http://www.erlebnishaft.de/stressvar1.pdf>
- ➔ **Bakterien Persister** <http://www.xerlebnishaft.de/trotzantibiosepat.pdf>
- ➔ **Horizontaler Gentransfer** <http://www.erlebnishaft.de/gentransfer.pdf>
- ➔ **Biofilme und Quorum sensing** <http://www.erlebnishaft.de/kommentbiofilmmed.pdf>
- ➔ <http://www.erlebnishaft.de/biofilmmed.pdf> <http://www.xerlebnishaft.de/quorum.pdf>
- ➔ **Bakterielle Resistenzmechanismen, Bacterial resistance mechanisms**
<http://www.xerlebnishaft.de/escape.pdf> http://www.xerlebnishaft.de/escape_eng.pdf
- ➔ **Selbst-Muster-Nano** http://www.erlebnishaft.de/selbst_muster_nano.pdf
- ➔ **Virulenz-Inhibitoren** http://www.kabilahsystems.de/virulenz_inhibitoren.pdf

Biofilm und Quorum sensing Therapeutika, Therapeutics:

Makrolide: Azithromycin, Clarithromycin; Lactoferrin, Ajoene aus Knoblauch, Polyphenole, Grape fruit, Lumbrokinase, Nattokinase, Antikoagulation, pH (H2), Samento, Banderol, N-Acetylcystein, Phenothiazine, Acyldepsipeptid (ADEP)

http://www.nature.com/nature/journal/v503/n7476/fig_tab/nature12834_F1.html

Elektromagnetismus und Ultraschall <http://www.xerlebnishaft.de/quorum.pdf>

Neoplasma and cancer diseases are caused by mitochondrial dysfunction (Warburg 0. 1958) und mutations effects eg. in the nucleolinus DNA (Cytoskeleton, Methyl-Cycle) and in the environment of the modifying micro-RNAs, polypeptides and fatty acids. In the consequence of this with you will find cell wall modifications and a functional change of the whole system (Quorum sensing) (Huismans BD, 2014).

Neoplasmen und Krebserkrankungen sind durch mitochondriale Dysfunktion (Warburg 0. 1958) und durch DNA-mutations Effekte z.B. im Nucleolinus des Zellkernes (Zytoskelett, Methyl-Zyklus) und durch modifizierte Mikro-RNAs sowie durch variante Polypeptide und

[Fettsäuren](#) verursacht. Die Folge davon sind Zell-Wand Funktions- und Systemänderungen ([Quorum sensing](#)) ([Huismans BD](#), 2014).

Cave:

Nelson C, Elmendorf S, Mead P (2014) **Neoplasms Misdiagnosed as “Chronic Lyme Disease”** JAMA Intern Med. doi:10.1001/jamainternmed.2014.5426
<http://archinte.jamanetwork.com/article.aspx?articleid=1921752>

Aber, however :

[Kallick CA](#), [Friedman DA](#), [Nyindo MB](#) (2015) **Could ehrlichial infection cause some of the changes associated with leukemia, myelodysplastic diseases and autoimmune disorders, and offer antibiotic treatment options?** [Med Hypotheses](#). 85(6), 891-3. doi: 10.1016/j.mehy.2015.09.015. Epub 2015 Sep 16. <https://www.ncbi.nlm.nih.gov/pubmed/26394545>

Ulfig N (2014) Kurzlehrbuch der Histologie

<http://books.google.de/books?id=aUHemixSTmEC&pg=PT30&lpg=PT30&dq=zuckerbindende+proteine+lectine&source=bl&ots=eEzdYmToqP&sig=xBKpCVKR7M-hDVrQrMhjMIRYppE&hl=de&sa=X&ei=hXsaVJmLLcmGOKT8gNgL&ved=0CCkQ6AEwADgU#v=onepage&q&f=false>

International Cancer Genome Consortium [ICGC](#)

Epstein RJ (2015) **A periodic table for cancer.** [Future Oncology](#). 11(5), 785-800 , DOI 10.2217/fon.14.315 (doi:10.2217/fon.14.315) <http://www.futuremedicine.com/doi/full/10.2217/fon.14.315>

„Here, it is proposed that treatment strategies could be fine-tuned upfront simply by quantifying tumorigenic spatial (cell growth) and temporal (genetic stability) control losses, as predicted by genetic defects of cell-cycle-regulatory gatekeeper and genome-stabilizing caretaker tumor suppressor genes, respectively. These differential quantifications of tumor dysfunction may in turn be used to create a tumor-specific ‘periodic table’ that guides rational formulation of survival-enhancing anticancer treatment strategies. »

FDA Approved Drugs for Oncology (2015) <https://www.centerwatch.com/drug-information/fda-approved-drugs/therapeutic-area/12/oncology>
<https://www.centerwatch.com/drug-information/fda-approved-drugs/therapeutic-area/12/oncology>

Der interdisziplinäre Beginn der Onkologie in Deutschland war 1903 in Berlin, Charité: Stahl, Strahl, Vergiftung.

Voswinckel P (2015) **Erinnerungsort Krebsbaracke.** Klarstellungen um das erste interdisziplinäre Krebsforschungsinstitut in Deutschland (Berlin, Charité)

The interdisciplinary beginning in Germany (1903): Scalpel, radiation, poisoning. Cancer barracks. Clarifications to the first interdisciplinary cancer research institute in Germany (Berlin, Charité)

<https://www.dgho.de/gesellschaft/geschichte/dgho-buecher/erinnerungsort-krebsbaracke>

**Diese Standards von 1903 bis 1933 gelten heute noch fast unverändert.
Standards that have been developed 1903-1933 are valid today almost unchanged.**

[Prigerson HG et al. \(2015\) JAMA Oncology](#) [Blanke CD, Fromme EK \(2015\) JAMA Oncology](#)

Hübner J (2015) **Komplementäres und Alternatives: Ohne Vorurteile prüfen.** Deutsches Ärzteblatt 112(14), C518-C521 <http://www.aerzteblatt.de/pdf/112/14/a622.pdf>

<http://www.aerzteblatt.de/archiv/169038/Onkologie-Komplementaeres-und-Alternatives-Ohne-Vorurteile-pruefen>
**„Nur eine vollständige Transparenz schafft die Basis für eine unabhängige Beurteilung und Bewertung. Einen Sonderweg soll und darf es für alternative Methoden und Komplementärmedizin nicht geben“
"Only complete transparency creates the basis for an independent assessment and review. A special**

path should not and must not give on alternative methods and Complementary Medicine "

Mellman I, Coukos G, Dranoff G (2011) Cancer immunotherapy comes of age. Nature 480, 480-489. <http://www.nature.com/nature/journal/v480/n7378/full/nature10673.html>

Weber JS (2015) Immunotherapy: 5 Ways to Stop Cancer
<https://www.youtube.com/user/CancerResearchInst?v=3hIGq-3F1uQ>

Warburg Hypothese, Warburg hypothesis

Wasserstoff, H₂, Vacuolar-type H⁺ - ATPase (V-ATPase), Katalase, Wasserstoffperoxyd, Katalasemangel in den Tumorzellen, deficiency of catalase in cancer cells

➔ **PH-Wert** <http://www.kabilahsystems.de/ph.pdf>

Warburg O et al. (1958) **Partielle Anaerobiose der Krebszellen** und Wirkung der Röntgenstrahlen auf Krebszellen. Max-Planck-Institut für Zellphysiologie, Berlin-Dahlem. In: Jahrbuch 1958 der Max-Planck-Gesellschaft zur Förderung der Wissenschaft e.V., Göttingen. pp 159-211

<http://link.springer.com/article/10.1007%2FBF00599078>

https://www.researchgate.net/researcher/1958105_O_WARBURG/publications/3

„Zum Krebsstoffwechsel gehört nicht nur die große Gärung, sondern auch die zu kleine Atmung. ... Der Abfall der Atmung erfolgt ... nicht vor dem Anstieg der Gärung, sondern nachher. ... Die Reihenfolge der Ereignisse bei der Entstehung des Krebsstoffwechsels ist also: Zuerst ungeordnetes Wachstum und, damit verbunden, Entkoppelung der Atmung und Anstieg der Gärung, darauf folgend, und zwar beschleunigt durch Sauerstoffmangel, Abfall der Atmung.“

Folmer O, Black M, Hoeh W, Lutz R, Vrijenhoek R (1994) **DNA primers for amplification of mitochondrial cytochrome c oxidase subunit I from diverse metazoan invertebrates.** Mol. Mar. Biol. Biotechnol. 3, 294–299. <http://www.ncbi.nlm.nih.gov/pubmed/7881515>

Saikali ZI, Singh G (2003) **Doxycycline and other Tetracyclines in the treatment of bone metastasis.** Anticancer Drugs. 14(10), 773-8 <http://www.ncbi.nlm.nih.gov/pubmed/14597870>
https://www.researchgate.net/publication/9026092_Doxycycline_and_other_tetracyclines_in_the_treatment_of_bone_metastasis

Navaglia F, Basso D, Fogar P, Sperti C, Greco E, Zambon C F et al. (2006) **Mitochondrial DNA D-loop in pancreatic cancer: somatic mutations are epiphenomena while the germline 16519 T variant worsens metabolism and outcome.** Am J Clin Pathol 126, 593-601.

<http://www.ncbi.nlm.nih.gov/pubmed/16938655> <http://ajcp.ascpjournals.org/content/126/4/593.long>

Büttner S, Carmona-Gutierrez D, Eisenberg T et al. (2009) **The Warburg effect suppresses oxidative stress induced apoptosis in a yeast model for cancer.** *PLoS One*. 4, 2. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0004592>

Chatterjee A, Dasgupta S, Sidransky D (2011) **Mitochondrial Subversion in Cancer.** *Cancer Prev Res (Phila)*. 4(5), 638–654. doi: [10.1158/1940-6207.CAPR-10-0326](https://doi.org/10.1158/1940-6207.CAPR-10-0326) PMID: PMC3298745
NIHMSID: NIHMS358940 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3298745/>

«This review offers some insight into the extent of mtDNA mutations, their functional consequences in tumorigenesis, mitochondrial therapeutics, and future clinical application. «

Loureiro R, Mesquita KA, Oliviera PJ et al. (2013) **Mitochondria in Cancer Stem Cells : A Target for Therapy.** *Recent Patents on Endocrine, Metabolic and Immune Drug Discovery* 7(2)
http://cnc.cj.uc.pt/~pauloliv/FCT%20Reports/P19project/P19_2012.pdf

[Lamb R, Harrison H, Hulit J](#) (2014) **Mitochondria as new therapeutic targets for eradicating cancer stem cells: Quantitative proteomics and functional validation via MCT1/2 inhibition.** *Oncotarget*. 5(22), 11029-37. <http://www.ncbi.nlm.nih.gov/pubmed/25415228>

[Seyfried TN](#) (2015) **Cancer as a mitochondrial metabolic disease.** *Front Cell Dev Biol*. 3, 43. doi: 10.3389/fcell.2015.00043. eCollection. <https://www.ncbi.nlm.nih.gov/pubmed/26217661>

Metzger MJ, Reinisch C, Sherry J, Goff SP (2015) **Horizontal transmission of clonal cancer cells causes leukemia in soft-shell clams.** *Cell* doi:10.1016/j.cell.2015.02.042.

<http://www.cell.com/cell/pdf/S0092-8674%2815%2900243-3.pdf>

« We therefore analyzed mitochondrial DNA (mtDNA) sequences and polymorphic microsatellite repeat loci and found that the genotypes of the neoplastic cells do not match those of their hosts. Our findings suggest that horizontal transmission of `cancer cells` is more widespread in nature than previously supposed“.

[Lamb R, Ozsvari B, Lisanti CL et al.](#) (2015) **Antibiotics that target mitochondria effectively eradicate cancer stem cells, across multiple tumor types: Treating cancer like an infectious disease.** *Oncotarget*, p.1-16 <http://www.ncbi.nlm.nih.gov/pubmed/25625193>

Pfanner N (2015) **Publications of Pfanner Lab.**

<http://www.biochemie.uni-freiburg.de/ag/pfanner/publications>

(2015) **Otto-Warburg-Medaille 2015 geht an Prof. Nikolaus Pfanner.**

<https://idw-online.de/de/news634438>

➔ **Mitochondrien** <http://www.xerlebnishaft.de/mitochondrien.pdf>

Aneuploidie – Hypothese, Genommutation – Hypothese und Krebs. Aneuploidy (Genom mutation) and Cancer, Toxine, toxins, mikrochimerismus, mikrochimerism

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Duesberg P, Rasnick D (2000) **Aneuploidy, the somatic mutation that makes cancer a species of its own.** *Cell Motility and the Cytoskeleton* 47, 81-107 [PDF](#)

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Duesberg P, Li R et al. (2005) **The chromosomal basis of cancer.** In: [Cell Oncol](#). 27 (5-6), 293–318.

[Chen WL, Luan YC, Shieh MC et al.](#) (2007) **Effects of Cobalt-60 Exposure on Health of Taiwan Residents Suggest New Approach Needed in Radiation Protection.** *Dose Response*. 5(1), 63–75.

Published online 2006 Aug 25. doi: [10.2203/dose-response.06-105.Chen](https://doi.org/10.2203/dose-response.06-105.Chen)
PMCID: PMC2477708 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2477708/>
“Medical treatments with long-term low dose rate ionizing radiation or with acute low dose exposures could be employed to prevent and control serious illnesses with no symptomatic side effects.^[25] For example, the evidence suggests that an annual supplement of whole-body radiation—50 mSv in several fractionated exposures—to elderly volunteers would stimulate their defences and provide protection against the scourge of cancer.”

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Nelson JL (2009) **Naturally acquired microchimerism: For better or for worse.** [Arthritis Rheum](#), 60, 5-7.

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«Our data have shown that TKI [Tyrosine kinase inhibitors] treatment of tumor patients may influence centrosomes in disease-unrelated cells or tissues. «

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Cirello V et al. (2010) **Fetal cell microchimerism in papillary thyroid cancer: studies in peripheral blood and tissues** [Int J Cancer](#), 126, 2874-78.

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- ➔ **Bakterien Stressvarianten, L-Formen, filterable forms (50-200 Nanometer), cell wall defective forms** <http://www.erlebnishaft.de/stressvar1.pdf>
- ➔ **Zytoskelett, Zentromer-kinetosom, Nucleolinus** <http://www.xerlebnishaft.de/zytoskelett.pdf>
- ➔ **RNA-Welt** <http://www.xerlebnishaft.de/rna.pdf>
- ➔ **Immunitaet** http://www.erlebnishaft.de/danger_model.pdf
- ➔ **Pathogenitätsfaktoren** http://www.xerlebnishaft.de/bakt_pathogenitaetsfaktoren.pdf
- ➔ **Immunsuppressive Virusarten** <http://www.erlebnishaft.de/immunsuppressivvirus.pdf>
- ➔ **Virus triggers** <http://www.erlebnishaft.de/virus triggers.pdf>
- ➔ **Virus, Bakterium und Immunsystem** <http://www.erlebnishaft.de/virusbaktimmun.pdf>
- ➔ **Horizontaler Gentransfer** <http://www.erlebnishaft.de/gen transfer.pdf>
- ➔ **Gendynamik** http://www.xerlebnishaft.de/gen_dynamik.pdf
- ➔ **Symbiogenese** <http://www.erlebnishaft.de/symbiogenese.pdf>

➔ **Selbstorganisation** http://www.erlebnishaft.de/selbst_muster_nano.pdf

Mizellen, micelles

- ➔ **Fettsäuren** <http://www.kabilahsystems.de/ungesaettfets.pdf>
- ➔ **Amine und Peptide** <http://www.kabilahsystems.de/biogeneamineundpeptide.pdf>
- ➔ **Toll like Rezeptoren** http://www.erlebnishaft.de/TLR2_1_3_7_13.pdf

Die Krebs – Stammzell – Hypothese, the cancer stem cell hypothesis

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„Die DTC-Diagnostik eröffnet neue Möglichkeiten zur zeitnahen Beurteilung der Therapieeffizienz im Rahmen der neoadjuvanten Therapie, der adjuvanten Therapie und zur Verlaufskontrolle.“

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[Gonzales JC, Fink LM, Goodman OB et al. \(2011\)](#) Comparison of Circulating MicroRNA 141 to Circulating Tumor Cells, Lactate Dehydrogenase, and Prostate-Specific Antigen for Determining Treatment Response in Patients With Metastatic Prostate Cancer. *Clin Genitourin Cancer* 9, 39–45
<http://www.clinical-genitourinary-cancer.com/article/S1558-7673%2811%2900016-4/abstract>

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<https://www.youtube.com/watch?v=tqrrHLkPNRc>

Gemma K, Alderton GK (2011) **Genomics: One cell at a time**. *Nature Reviews Cancer* 11, 312
[doi:10.1038/nrc3060 http://www.nature.com/nrc/journal/v11/n5/full/nrc3060.html](http://www.nature.com/nrc/journal/v11/n5/full/nrc3060.html)

[Arnout G. Schepers](#) AG, [Hugo J. Snippert](#) HJ, [Daniel E. Stange](#) DE et al. (2012) Lineage Tracing Reveals Lgr5⁺ Stem Cell Activity in Mouse Intestinal Adenomas. *Science* 337(6095), 730-735 DOI: 10.1126/science.1224676 <http://www.sciencemag.org/content/337/6095/730.abstract>

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<http://www.medscapemedizin.de/artikel/4900580>

[Lu Han](#) L, [Sanjun Shi](#) S, [Tao Gong](#) T et al (2013) **Cancer stem cells: therapeutic implications and perspectives in cancer therapy**. *Acta Pharmaceutica Sinica B*. 3(2), 65-75
DOI: 10.1016/j.apsb.2013.02.006
<http://www.sciencedirect.com/science/article/pii/S2211383513000208>

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http://www.senologie.org/fileadmin/media/documents/Presse/Schneeweiss_Zirkulierende_Tumorzellen_im_Blut_Presstext_FIN.pdf

„Zusammenfassend sprechen die Studien und Forschungsergebnisse für eine hohe klinische und wissenschaftliche Relevanz des Nachweises von CTC im Blut von Patientinnen mit Brustkrebs. Aufgrund der bisherigen Daten könnte die CTC-Messung mit dem CellSearch™ Systems schon jetzt zur Unterstützung der klinischen Entscheidungsfindung in bestimmten Einzelfällen in der metastasierten Situation sinnvoll sein“.

http://www.adnagen.com/hosting_i24/daten/Objekte/Download_Dateien/Zusammenfassung.pdf

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<http://www.aerzteblatt.de/pdf/111/37/a1512.pdf>

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<http://www.dkfz.de/de/presse/pressemitteilungen/2014/dkfz-pm-14-43-Krebsstammzellen-im-Tumor-bestimmen-die-Lebenserwartung-bei-Brustkrebs.php>

Institut für Pathologie Universitätsklinikum Heidelberg (2014)

https://www.klinikum.uni-heidelberg.de/pressemitteilungen.136514.0.html?ifab_modus=detail&ifab_id=5064

Telefon: 0800 - 420 30 40, täglich kostenlos von 8 bis 20 Uhr

E-Mail: krebsinformationsdienst@dkfz.de; www.krebsinformationsdienst.de

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<http://www.sciencemag.org/content/347/6217/78>

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Zuckerbindende Proteine, Lectine

Lectine „[sind] ... zuckerbindende Proteine ohne enzymatische Aktivität. ... Bei Säugern dienen sie der Zell-Zell-Erkennung. Außerdem wirken sie mitogen und stimulieren die interzelluläre Kommunikation durch Freisetzung von Botenstoffen“. -> [Lectin-Histochemie](#).
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CD47 <http://en.wikipedia.org/wiki/CD47>

CD47 (Cluster of Differentiation 47) auch als Integrin-assoziiertes Protein (IAP) bekannt. CD47 ist ein Transmembran-Protein, das beim Menschen durch das CD47-Gen kodiert wird. CD47 gehört zur Superfamilie der Immunglobuline. CD47 ist in einer Reihe von zellulären Prozessen, einschließlich der Apoptose, Proliferation, Adhäsion und Migration beteiligt. Darüber hinaus spielt es eine wichtige Rolle bei der Immun- Antwort und bei der Angiogenese. CD47 wird ubiquitär in menschlichen Zellen exprimiert.

CD47 wird in vielen Tumorzellen überexprimiert.

CD47 (Cluster of Differentiation 47) also known as integrin associated protein (IAP). CD47 is a transmembrane protein that in humans is encoded by the CD47 gene. CD47 belongs to the immunoglobulin superfamily. CD47 is involved in a range of cellular processes, including apoptosis, proliferation, adhesion, migration. Furthermore, it plays a key role in immune and angiogenic responses. CD47 is ubiquitously expressed in human cells. CD47 has found to be overexpressed in many different tumor cells.
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«**Matrix metalloproteinases (MMPs) make up the majority of ECM degrading enzymes implicated in cancer metastasis. The potent MMP inhibitory activities of tetracyclines, especially their chemically modified analogs, combined with their relatively well tolerated pharmacological profile, led several researchers to investigate their anticancer potential in a variety of cancers, including melanoma, lung, breast and prostate cancers.** «

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Salinomycin

Salinomycin ist ein in der Tiermedizin zugelassenes **Polyether**-Antibiotikum gegen **Protozoen**

Salinomycin is an approved antibiotic <http://en.wikipedia.org/wiki/Salinomycin> in veterinary medicine against **protozoa**
http://www.vetpharm.uzh.ch/reloader.htm?wir/00005300/3104_04.htm?wir/00005300/3104_00.htm

**Eine Zulassung für die Humanmedizin besteht nicht.
An authorization for human medicine does not exist.**

„Die Einnahme von Salinomycin (Reinsubstanz oder Tierfutter-Zusatzstoff 10%-12%) oral ist HOCHGIFTIG und LEBENSGEFÄHRLICH und darf NIEMALS erfolgen.

Es kommt u. a. zu lebensgefährliche Rhabdomyolysen (Auflösung der Muskulatur)

Salinomycin INTRAVENÖS ist in einer bestimmten Dosis sehr gut verträglich und zeigt gewisse Erfolge hinsichtlich einer Tumorregression.

The use of salinomycin (pure substance or animal feed additive 10% -12%) is orally HIGH TOXIC and HAZARDOUS LIVE and may NEVER be done.

It depends, inter alia, to life-threatening rhabdomyolysis (dissolution of the muscles). Salinomycin INTRAVENOUSLY is very well tolerated in a single dose, showing some success in terms of tumor regression.“ Quelle: <http://www.krebs-kompass.de/showthread.php?t=51961>

„Salinomycin verursacht einen Ausstrom von Kationen, bevorzugt Kalium, aus dem Zytoplasma und aus den Mitochondrien. Die verminderte intrazelluläre Kalium-Konzentration führt zur Entkopplung der oxidativen Phosphorylierung und induziert

damit den Zelltod.“ Quelle: <http://flexikon.doccheck.com/de/Salinomycin>

„Salinomycin is a polyether potassium ionophore antibiotic, which promotes cation movement across biological membranes via exchange-diffusion. As a result of this cation exchange, the transmembrane gradients are altered, which leads to changes in cellular function and metabolism. In addition, Salinomycin acts as a chelating agent towards monovalent cations such as sodium and potassium ions. Alternate studies suggest that Salinomycin selectively inhibits cancer stem-like cells.“

Quelle: <http://www.scbio.de/datasheet-253530-salinomycin.html>

Salinomycin besitzt eine geringe therapeutische Breite. Bei akzidentellen Vergiftungen traten beim Menschen unter anderem Nausea, Photophobie, neurologische Störungen und Rhabdomyolyse auf.

Salinomycin has a narrow therapeutic index. When accidental poisoning in humans, among other things occurred nausea, photophobia, neurological disorders and rhabdomyolysis.“ Quelle: <http://flexikon.doccheck.com/de/Salinomycin>

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Seneca-Valley-Virus

Ein natürlich vorkommendes onkolytisches Virus, das einzige bekannte apathogene Virus aus der Familie Picornaviridae, ist das Seneca-Valley-Virus.

A naturally occurring oncolytic virus, the only known non-pathogenic virus of the family Picornaviridae, is the Seneca Valley virus.

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➔ **Targeting Tumors with Viruses (2014)**

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Nagalase Test

<http://nagalase-test.de/fragen-und-antworten-nagalase-test/>
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Gc-MAF

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« We demonstrated that GcMAF-containing human serum can be used as a potential macrophage activator for cancer immunotherapy.“

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„The results of our integrative immunotherapy seem hopeful. We also plan to conduct a comparative clinical study. Immunotherapy has become an attractive new strategy in the treatment of cancer. »

Sample records for serum nagalase activity from WorldWideScience.org

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MicroRNA

„MicroRNA, abgekürzt miRNA oder miR, sind kurze, hoch konservierte, nichtcodierende RNAs, die eine wichtige Rolle in dem komplexen Netzwerk der Genregulation, insbesondere beim Gen-Silencing spielen. MicroRNAs weisen im Allgemeinen eine Größe von 21 bis 23 Nukleotiden (nt) auf.

MicroRNA, miRNA or miR abbreviated, are short, highly conserved, non-coding RNAs that play an important role in the complex network of gene regulation, particularly in gene silencing. miRNAs generally have a size of 21 to 23 nucleotides (nt).“

Quelle, source: [Wikipedia http://de.wikipedia.org/wiki/MicroRNA](http://de.wikipedia.org/wiki/MicroRNA)

„...Wir sind natürlich nicht sicher, dass es so ablief. Aber das vorgeschlagene Prozedere scheint bei weitem das einfachste und wahrscheinlichste zu sein, um von der RNA-Welt, die nach allgemeiner Übereinstimmung zuerst da war, zur heutigen DNA-RNA-Welt zu gelangen. Wie eine populäre Theorie behauptet, sind in Retroviren bis auf den heutigen Tag Spuren dieser schicksalhaften Ereignisse erhalten.“

"... We are of course not sure it expired so. But the proposed procedure seems by far to be easiest and most likely to attain the RNA world, which, by common consent was first to arrive at the current DNA-RNA world. As a popular theory claims are in retroviruses until today traces of this fateful event. "

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„Abstract MicroRNAs (miRNAs) have been uncovered as important posttranscriptional regulators of nearly every biological process in the cell. Furthermore, mounting evidence implies that miRNAs play key roles in the pathogenesis of cancer and that many miRNAs can function either as oncogenes or tumor suppressors. Thus, miRNAs have rapidly emerged as promising targets for the development of novel anticancer therapeutics. The development of miRNA-based cancer therapeutics relies on restoring the activity of tumor suppressor miRNAs using double-stranded miRNA mimics or inhibition of oncogenic miRNAs using single-stranded antisense oligonucleotides, termed antimiRs. In the present review, we focus on recent advancements in the discovery and development of miRNA-based cancer therapeutics using these 2 approaches. In addition, we summarize selected studies, in which modulation of miRNA activity in preclinical cancer models in vivo has demonstrated promising therapeutic potential.“

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Amanitin und Antamanid

Alpha-Amanitin (Amatoxine aus Amanita phalloides (Grüner Knollenblätterpilz) inhibiert vor allem die eukaryotische RNA-Polymerase II und III, nicht aber I. Die prokaryotischen RNA-Polymerasen werden nicht inhibiert. Die Aktivität der eukaryotischen RNA-Polymerasen soll in Tumorzellen nahezu ungebremst sein.

Alpha-amanitin (amatoxins) Amanita phalloides from (Green Amanita mushroom) inhibits mainly the eukaryotic RNA polymerase II and III, but not I. The prokaryotic RNA polymerases are not inhibited. In tumor cells, the activity of the eukaryotic RNA polymerases possibly are continuing almost without relent.

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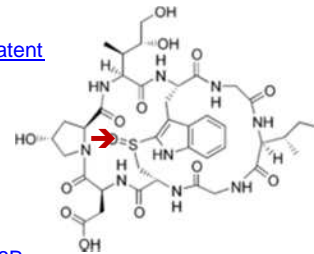
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Bioresonance therapy is not part of the spectrum of methods of science medicine.
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